EMERGENCY LATE CROP PLANTING

	APPROX LATEST DATE TO PLANT	LBS PER ACRE	READY FOR USE
Grain Sorghum	June 25	8-12	Grain Medium to Hard Dough
Sudangrass	July 1	6-8 (18-24" rows)	Pasture 18-24"
Sudangrass Hybrid	July	15-25 drilled 8-12 (32-42"rows)	Green chop-heading
Sorg-Sudangrass	July 1-15	10-20 drilled	Pasture 24-30"
Millet	July 5 July 10	15 25	Seed hard Heading
Rape	July 20	5	When 10" tall
Buckwheat	July 10	40-50	Mature
Rye	July 15	80-110	Plants well established

PURE LIVE SEED (PLS)

A purity of 99.50 x a germination of 90% = 99.50 x .90 = 89.55 PLS

100 lbs. of this seed would contain 89.55 lbs.. of pure live seed. If needed 80 PLS lbs. you would need 89.34 bulk lbs. (80.00/89.55)

NITRATE AND PRUSSIC ACID POISONING

Plant nitrate poisoning in ruminants usually occurs as a result of consuming forages of high nitrite or nitrate content. Some plants have a tendency to exhibit high nitrate content and others under certain conditions, have the ability to accumulate large quantities of nitrates. Toxic levels of nitrate are sometimes found in common pasture grasses, especially during rapid growth at high rates of nitrogen fertility.

Corn grown under droughty conditions may concentrate nitrates in the base of the stalk. However, most losses occur in the Great Plains states when oats, barley or wheat are fed after a recent rain.

A variety of common weeds growing on marsh or muck soils, which have high nitrogen and relatively low phosphorus and potassium content, can cause nitrate poisoning problems in livestock. Low temperatures, limited sunlight, poor mineral sources and application of plant hormone type herbicides can also contribute to increased nitrate Levels. Other causes and aggravating conditions may be shallow wells and nitrate type fertilizers where animals feed. Animals fed a high ratio of high energy grain feed are better able to withstand high nitrate levels in forage.

Prussic acid poisoning symptoms are very similar to those of nitrate poisoning. The most important cause of prussic acid poisoning among domestic animals is the ingestion of such plants as arrowgrass, johnsongrass, sudangrass, common sorghum or sorghum sudan hybrids, several berry type plants and flax. These plants contain cyanogenetic glycosides which, when acted upon by digestive enzymes, yield prussic acid. These conditions can also be aggravated by heavy nitrogen fertilization, wifting, trampling and plant diseases. Very young, rapidly developing plants contain greater quantities of these glycosides. Spraying of these plants with herbicides may also increase the toxic hazard.

Grazing plants such as sorghums should be avoided during periods of early growth (under 18 inches) or directly after a frost. New growth after a frost should be avoided, as concentrations may be high. There is little danger from feeding well cured hay. The risk of prussic acid poisoning may be decreased by feeding of ground cereal grains or other feed before animals are turned out to graze.